

**West Mojave Plan  
Task Group 1  
Green Tree Inn, Victorville  
September 17, 2001**

**Attendees**

**Task Group:** Ileene Anderson, Ray Bransfield, Marie Brashear, Paul Condon, Mike Connor, Jeri Ferguson, Jennifer Foster, Ken Foster, Mark Hagan, Gerry Hillier, Manuel Joia, Becky Jones, Peter Kiriakos, Greg Knapp, Paul Kober, Charles LaClaire, Phil Leitner, Laurie Lile, David Matthews, Tonya Moore, Jim McRea, Lorelei Oviatt, Doug Parham, Mickey Quillman, Tim Read, Jim Schroeter, Randy Scott, Courtney Smith, Patricia Smith, Debbie Stevens, Donna Thomas, Barbara Veale, Marcia Wertenberger, Terry Wold.

**West Mojave Team:** Bill Haigh, Larry LaPre, Ed LaRue, Valery Pilmer.

**Introductions**

Bill Haigh opened the meeting at 9:50 A.M., and introductions were made. The August 13, 2001 meeting notes were approved by the group as submitted.

**Mohave Ground Squirrel Presentation**

Bill Haigh introduced Dr. Phil Leitner, a professor at St. Mary's College. Dr. Leitner started work on the Mohave ground squirrel (MGS) forty years ago as a graduate student at UCLA. Dr. Leitner presented information on the Mohave ground squirrel based on studies done in the Northwest Mojave Desert

In 1978 and 1979, Dr. Leitner did biological surveys for the geothermal plant at Coso Hot Springs. During the last 1980's he was asked to come back and devise mitigation for the geothermal plant. A nine year study (1988-1997) was conducted. As part of the study, ground squirrels were collected from live traps and fitted with radio collars for tracking purposes. They determined the MGS diet from droppings and compared these to the droppings and diets of other species in the area. Following are some of the points Dr. Leitner made during his presentation:

- MGS is found only in the western part of the Mojave Desert.
- People may confuse the MGS with the white tailed antelope squirrel which is active all year round. MGS is active above ground for a very limited time and has an 8 month dormancy period.
- Young are born around April 1<sup>st</sup> and are weaned in early summer.
- A minimum of three inches (75mm) of rain is needed before MGS will reproduce.

Equates to 1 gram per square feet of dry standing crop of annual plants. They will not reproduce during years drier than this.

- MGS depends on green foliage since this is its only source of water. A large part of its diet is spring wildflowers and forbs. In real dry years MGS will eat shrub leaves. MGS will eat seeds and shrubs later in the summer when forbs dry out. Shrubs equal 45% of overall diet, and 42% is annuals. The following comparison of shrubs as a food source was made.

Shrub	% eaten by MGS	% existing on site
Salt bush	17%	36%
Spiny hopsage	33%	22%
Winterfat	38%	9%

- By comparison, the cattle diet at the study site consisted of 45% shrubs, 45% grasses, and 15% forbs. Sheep diet during a dry year was 50% shrubs, 25% grasses and 25% forbs. 24% of cattle diet was winterfat. In dry year 50% of sheep diet was winterfat. An overlap in diet with MGS was shown but not necessarily competition.
- The best sites for MGS contain high shrub cover, and a high concentration of spiny hopsage and winterfat.
- Individual MGS range is 1 to 5 acres. In breeding season, males range to 100 acres. Juveniles dispersed up to 4 miles in late May.

Dr. Leitner responded to the following questions:

- **How would you characterize 1999 in terms of precipitation?** Dry.
- **Is there any evidence of interbreeding between MGS and the round tailed ground squirrel?** The two species are closely enough related where it is thought they may be hybridized. However, no one has looked at this and biologists have no idea whether this occurs. The two species differ in chromosome count.
- **Is MGS subject to predation?** Yes, particularly the young. Although no one has seen specific evidence of predation, it seems likely that they are prey for snakes, kit fox, and coyotes. Some potential for raven predation exists, but is not documented.
- **Do MGS have sensitive hearing?** They seem to detect humans readily. They like areas with a lot of brush cover.
- **What is the ratio of males to females?** The ratio is about 50/50 in the young. There are more females than males in the older population.
- **Any evidence of double clutching?** Aware of one female in 1992 ( a wet year) that may have had two litters. The species has such a limited time to raise one litter of young that it is unlikely.
- **Will MGS breed if the rains come late (Feb/March)?** If there is enough rain, even if

late, MGS will reproduce.

- **Why is it Mohave with an h rather than with a j ?** Apparently when giving the species its scientific name, they were unable to use a j as the letter is not reproduced in Latin.

Additional information:

- Except for males looking for females, there is no evidence of adults moving - only the young seem to disperse.
- MGS can live as long as 6 years.
- No systematic range wide surveys for MGS have occurred.
- In 1980, Jeff Aardahl did trapping at 22 sites in Kern and San Bernardino County. He found a total of 343 MGS, ranging from 1-69 per site as far south as Kramer Hills. 1980 was a rainy year.
- In 2001, 23 sites were surveyed. At 21 of those sites no MGS were captured. The only place where MGS was successfully trapped this year was at Coso (2 at one site and 14 at another).

### **Mohave Ground Squirrel/Tortoise Conservation Strategy Reconciliation Chart**

Bill Haigh directed the group's attention to the handout that lists consensus strategy on the Desert Tortoise and compares it to the draft MGS strategy.

- **1a. Management Area Boundaries**  
Ed LaRue outlined the MGS Conservation Area on the West Mojave blue blob map. He noted that about 1/3 of the area of the Tortoise DWMA is overlapped with the MGS Conservation Area. The areas not within the DWMA are generally to the north and west. The following issues were raised during discussion:
  - ▶ Peter Kiriakos raised concerns about connectivity between isolated patches. He is not happy with an all or nothing approach, and asks that some management provisions be considered outside the conservation areas to help ensure connectivity between areas. Bill Haigh noted that movement corridors (i.e Big Rock Creek) are not shown on the map. These corridors, as well the L.A. County Significant Ecological Areas (SEAs) and the conservation areas for other species, will help provide the needed connectivity. It was also noted that areas outside of the plan boundaries also serve as connectors. **The map will be revised to note some of these additional features.**
  - ▶ Peter Kiriakos and Ileene Anderson both pointed out that you cannot rely on the SEAs for conservation as development is still allowed. Ed LaRue indicated that the process for review of development is fairly onerous in these areas.
  - ▶ Peter Kiriakos stated that military management cannot be counted on for the West

Mojave Plan. He noted that the new Edwards Air Force Base Management Plan is out for public review. He asked that the BLM request an extension of time for commenting on the plan and provide copies of the plan to Task Group 1 members. Mark Hagan confirmed that the plan is out for review and noted that it is available on the internet. Bill Haigh asked whether Hagan could report back on the types of comments they receive on the plan. Ed LaRue will get together with Hagan and will review the document. Mike Connor also expressed concern with the Edward's plan. He was concerned that the EAFB plan does not guarantee protection of desert cymopterus.

Bill Haigh asked the group to set up a subcommittee to work on boundary changes to the MGS Conservation Area, and come back on October 15<sup>th</sup> with maps and a recommendation. Ed LaRue will be the subcommittee coordinator. The subcommittee was formed as follows:

City of Ridgecrest	Jim McCrea
Inyo County	Courtney Smith
Calif. Fish and Game	John Gustafson
Trona/Searles Area	Bob Strub
California City	Paul Condon
General Public	Dave Matthews

Ed LaRue will have revised boundaries for the Biological Transition Areas (BTAs) as well as revised boundaries for the Habitat Conservation Area (HCA) on October 15<sup>th</sup>. Bill Haigh asked whether the BTA concept should be extended to the MGS Conservation Area. The following issues were raised during the discussion:

- ▶ Mike Connor questioned the one mile criteria for the BTA for the MGS Conservation Area.
- ▶ Gerry Hillier expressed concern that there is no framework for establishing a BTA as there is no critical habitat for the MGS. He expressed reservations about a BTA until he can see a map.
- ▶ Lorelei Oviatt asked what management prescriptions would apply to the BTA. She indicated that these would need to be different than those specified for the tortoise.
- ▶ It was noted that there is no proposal for trapping of ground squirrels inside or outside the HCA.

Bill Haigh suggested that the Structure (BTA) Subcommittee reconvene to look at the mapping of the BTAs around the MGS Conservation Area. Ed LaRue noted that he can have the proposed mapping completed by October 11<sup>th</sup>. Peter Kiriakos was added to the subcommittee to represent environmental interests. This subcommittee and the one established to look at the boundaries for the MGS Conservation Area will meeting jointly. Ed LaRue will coordinate the meeting.

Ed LaRue directed discussion to the proposed Los Angeles County Zone Maintenance Area referenced on page 4 of the document. He indicated that this proposal is an attempt to provide some level of protection to MGS and maintain a viable population in the southern area of the West Mojave. Larry LaPre noted that Los Angeles County is proposing an expansion of the existing Significant Ecological Areas (SEA) as part of their General Plan Update. If this proposal is approved, it could result in the downzoning of land in the area to a minimum of 10 acre parcels, achieving the proposed goal of no upzoning during the life of the plan for this area. Final determination on this area won't be known until the Los Angeles County Board of Supervisors takes action on the General Plan Update.

- ▶ Ileene Anderson noted that the Technical Advisory Committee that reviews projects within the SEAs is a recommending body only and that its recommendations can be overruled.
- ▶ Peter Kiriakos indicated that 10 acre minimum parcel size is a good starting point, but feels that some level of additional control is necessary to achieve a level of conservation. He would like to see some commitment from the county in writing, and would like to add language which encourages conservation easements where feasible.
- ▶ Lorelei Oviatt expressed concern that this concept conflicts with the Equitable Precepts which state that we would not require a lock-in of zoning. She objects to the use of the term **zone maintenance**. She accepts the bolded alternative on page 4, but not the zone maintenance concept.
- ▶ Mike Connor suggested calling this area a **Special Review Area** to be consistent with what was done for the tortoise. He would also like to see something more definitive than the language shown in bold.
- ▶ Ed LaRue clarified that this area would be considered an incidental take area with a 1:1 or 0.5:1 compensation ratio.
- ▶ Laurie Lile stated that future zone changes cannot be restricted.
- ▶ Larry LaPre indicated that Los Angeles County will not commit to no zone change ever, but is open to suggestions and wants to be consistent with the West Mojave Plan. He suggests that he and Ed LaRue meet with Los Angeles County and bring back language.

**Bill Haigh indicated that Larry LaPre and Ed LaRue will work on the language for the Los Angeles County Zone Maintenance Area and will bring it back to the next meeting.**

Ed LaRue discussed the proposed Kern County Study Area outlined on page 5. The focus of this area is a trapping study proposed to see if genetic differences exist between ground squirrels in this area and other populations. The rationale for the study is to determine whether MGS is present in the northern part of the Antelope Valley, and if so, are they

important to the conservation of the species. Approximately six square miles within this area is public land; the remainder is private. The following comments were made during the discussion of this item:

- ▶ Boundary of the area under discussion is not clear in the proposed text.
- ▶ If differences in the MGS population in this area are found, what happens?
- ▶ Lorelei Oviatt questioned whether this could be called a conservation strategy since we don't know whether MGS is present in the area or not. Development pressure in the area is very low. She supports moving the concept to page 14 under research and monitoring, with the understanding that through adaptive management, the boundary for the MGS Conservation Area could be revisited.
- ▶ Becky Jones pointed out that the boundary for the MGS range is based on where people have conducted studies, not necessarily where MGS exists. They may be present in areas where studies have not taken place.
- ▶ Ileene Anderson questioned whether Lucerne Valley in the southern part of the range should also be included as an additional study area.
- ▶ Gerry Hillier stated he felt it detracted from the plan to include this what if statement, and that it would be better to stick with the defined HCA, and if there is a need to modify the plan later, then do so. He suggested going with the best data, and if the California Department of Fish and Game (CDFG) wants to do a study, it may do so.
- ▶ Randy Scott concurred with Gerry Hillier. He also indicated that such a study should not be expanded to look at areas east of the Mojave River (Apple Valley, Lucerne Valley) given the rate of urbanization in this area.
- ▶ Laurie Lile indicated that it is important to the City of Palmdale that MGS be covered by the Plan. She supports incorporating the issue under research on page 14.
- ▶ Peter Kiriakos would like the Kern County area shown on the map so as not to bury the concept. He would object if the area east of the Mojave River is left out of consideration. He stated that the plan is more than a land acquisition plan, and research is needed to preserve the species. He indicated support for a possible alternative suggested by Lorelei Oviatt that would include calling the area a potential HCA, conduct trapping and if no MGS are found, then remove the potential HCA designation. He would also like to group to reconsider the concept of conservation easements which could lessen the cost of land acquisition.
- ▶ Ray Bransfield indicated that the focus needs to be kept on large conservation areas that can be reasonably managed. He noted that nothing precludes agencies from coming back and dealing with new circumstances and study areas at a later time. He noted the plan needs to move forward, or it won't get done.
- ▶ Mike Connor indicated that areas other than the proposed Kern County Study Area should also have surveys done. He indicated that in regards to the Kern County area, if MGS is present, the area needs conservation.
- ▶ Dave Matthews expressed concern that the Ridgecrest area was being heavily

affected by the proposed MGS Conservation Area. He would like to see the study expanded to include its entire range. Lorelei responded that even if MGS were found in more urbanized areas to the south, it would be difficult to conserve it in those areas. It was noted that the exclusion area around the City of Ridgecrest would be looked at closely by the subcommittee to try to mitigate the affects on the City.

**The group agreed to move this recommendation to the Research and Monitoring Program discussion on page 14, and revise the wording to read as follows:**

**Trapping studies should be undertaken in the northern portion of the Antelope Valley in Kern County, on the 23 sections of public land located within a region generally bounded by the Tehachapi Mountains to the northwest, an unpaved road accessing Little Oak Creek Canyon to the west, the Los Angeles aqueduct to the southeast, and the Tehachapi - Willow Springs Road to the northeast. Upon the recommendation of the Mohave Ground Squirrel Technical Advisory Group (based on their review of the survey results) and through the adaptive management provisions of the West Mojave Plan, the MGS conservation area boundary could be adjusted.**

### **Future Meeting Dates**

A future meeting date was set for Thursday, November 1, 2001 at 9:30 AM at the Green Tree Inn, Victorville. The task group was reminded that the next meeting will be held on Monday October 15, 2001 at 9:30 AM at the Green Tree Inn, Victorville.

### **Plants and Other Species**

Larry LaPre provided a draft of a new portion of Chapter 4 of the Evaluation Report, proposing conservation strategies for many of the plants which are expected to be covered by the West Mojave Plan incidental take permit, for review by the group. He also provided an overview as follows.

- **Bendire's thrasher**  
A survey for Bendire's thrasher was conducted this past summer. The survey teams revisited areas where thrashers were found in the 1980's. These locations were recommended for designation as conservation areas by the 1999 draft evaluation report. The survey found no Bendire's thrashers within the western Mojave except for the proposed conservation area on Coolgardie Mesa, southwest of Fort Irwin. Biologists do not know why birds were not found elsewhere. The proposed conservation areas for this species may be modified as a result.
- **Clokey's crypantha**  
Rare plant studies were conducted to look for this species, a West Mojave endemic which

is found on lands in and around the proposed Fort Irwin expansion area. Approximately 10 million plants were located, the great majority on the China Lake Naval Air Weapons Station, but also within the proposed expansion area and adjacent BLM lands. None were located outside of these areas. The West Mojave Plan probably will not be able to cover this species.

- **Alkali mariposa lily**

This species is almost a West Mojave endemic. The establishment of a core conservation area adjacent to the western boundary of Edwards Air Force Base and the preservation of isolated parcels in disjunct locations are proposed. General mitigation fees at a ratio of 5:1 would be paid for development within the conservation area. An Interim Conservation Area would be established for other areas around Edwards Air Force Base, in conjunction with a five year research program. Final conservation area boundaries would be established after the research is concluded. LaPre suggested that the Compensation Subcommittee should consider whether mitigation funds collected within plant conservation areas should be directed towards mitigation for that species rather than be combined with other mitigation funds.

- **Barstow woolly sunflower**

A conservation area is proposed. BLM and CDFG are engaged in a land exchange which would consolidate state lands into a twenty square mile ecological reserve northeast of Kramer Junction. This ecological reserve would constitute the conservation area.

- **Lane Mountain milkvetch**

In general, about 1/3 of the species' known range is located on Fort Irwin and the expansion area and about 2/3 of the known plants are within the expansion area. Expect some kind of reserve on army land and some kind on public land.

Marcia Wertenberger (Army) indicated that additional information will soon be forthcoming. Another large area of plants exists, and the final results and biostatistical analysis of extensive surveys conducted by Army earlier this year is yet to be finished. She will present additional information to the task group at the next meeting which will give a more complete biological overview. A new report being prepared by the survey consultants will provide population numbers supported by statistics.

- **Desert cympterus**

Only 10% of species are on private and public lands outside of military lands. This will make it difficult to cover this species. Peter Kiriakos reiterated his request that the BLM ask for an extension of time for review of the Edwards Air Force Base management plan. He would like to see a presentation at the next meeting as well.

**The meeting adjourned at 4:00 P.M.**